

LITTLE COLORADO RIVER BASIN

09384000 LITTLE COLORADO RIVER ABOVE LYMAN LAKE, NEAR ST. JOHNS, AZ

LOCATION--Lat 34°18'52", long 109°21'42", in SW_{1/4}SE_{1/4} sec. 27, T.11 N., R.28 E., Apache County, Hydrologic Unit 15020001, on left bank 0.75 mi downstream from Coyote Creek, 6 mi upstream from Lyman Dam, and 15 mi south of St. Johns.

DRAINAGE AREA--706 mi², of which 2.5 mi² is noncontributing.

PERIOD OF RECORD--Apr. 1940 to current year. Prior to Oct. 1975 published as "above Lyman Reservoir."

REVISED RECORDS--WDR AZ-88-1: Drainage area.

GAGE--Water-stage recorder and crest-stage gage. Elevation of gage is 6,010 ft above sea level, from topographic map. Prior to Dec. 7, 1976, water-stage recorder at site 0.4 mi downstream at datum approximately 20 ft lower, used as supplemental gage Mar. 21, 1980, to Apr. 21, 1987. See WSP 1313 for history of changes prior to 1950.

REMARKS--Records fair, except for estimated daily discharges, which are poor. Flow regulated by many small reservoirs—combined capacity, about 15,500 acre-ft. Diversions for irrigation of about 6,700 acres above station.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 16,000 ft³/s July 25, 1940, gage height, 17.1 ft, datum then in use, from floodmarks, by slope-area measurement of peak flow and reservoir inflow studies; maximum gage height, 18.6 ft, Sept. 12, 1975, at previous site (from graph recorded to 18.4 ft); no flow at times.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 400 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 13.....	1215	*128	*3.38

Minimum daily discharge, 0.08 ft³/s, Sept. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.29	1.4	2.2	2.2	2.9	3.4	33	13	0.37	5.1	0.11	2.5
2	0.52	1.5	2.2	2.2	2.5	3.3	33	11	0.37	1.8	0.10	2.3
3	0.94	1.2	2.2	2.3	2.9	3.4	40	12	0.22	0.88	0.27	1.9
4	1.2	1.2	2.3	2.3	2.8	3.8	43	24	0.14	0.35	0.23	2.0
5	1.6	0.82	2.3	2.0	2.9	4.8	41	19	0.11	0.24	1.0	2.4
6	1.6	1.00	2.3	2.1	2.8	5.4	40	16	0.10	0.18	2.5	4.2
7	2.0	0.94	2.3	2.0	2.9	4.9	43	15	0.10	0.18	1.8	2.2
8	3.2	0.90	2.4	2.1	3.0	4.3	53	15	0.09	0.18	2.4	1.2
9	4.5	0.71	2.4	2.1	2.9	4.0	62	15	0.10	0.12	2.2	0.57
10	4.1	1.0	2.3	2.2	2.9	4.1	68	14	0.09	0.12	1.3	0.32
11	2.9	1.2	2.5	2.3	2.9	9.6	100	12	0.10	0.15	0.53	0.21
12	2.6	1.5	2.7	2.4	2.9	26	92	11	0.17	0.12	0.26	0.15
13	2.6	1.5	2.4	2.4	2.8	46	103	9.7	0.12	0.10	0.13	0.09
14	2.5	1.2	2.6	2.5	2.7	45	106	8.8	0.10	0.10	14	0.08
15	2.5	1.5	2.5	2.5	2.8	61	100	7.8	0.09	0.52	7.1	0.13
16	2.3	1.8	1.9	2.6	3.0	70	83	8.2	0.09	6.8	9.5	0.13
17	2.7	1.6	2.2	2.6	3.0	62	79	6.6	0.09	8.8	15	0.13
18	2.6	1.5	2.3	2.6	3.0	59	60	4.9	0.09	4.7	15	0.56
19	1.9	1.6	2.1	2.5	3.0	54	52	7.3	0.09	4.3	14	1.2
20	1.7	1.7	2.1	2.5	3.1	47	48	6.0	0.09	3.0	17	1.6
21	1.8	1.7	2.2	2.5	3.2	41	41	5.1	0.09	1.6	11	2.5
22	1.6	1.8	2.3	2.7	3.1	39	23	4.7	0.09	0.92	9.8	3.6
23	1.8	2.0	2.0	2.7	3.0	49	18	3.1	0.09	0.57	7.6	2.7
24	1.8	1.9	2.1	2.7	3.1	76	23	2.4	0.09	0.31	5.4	2.1
25	1.9	2.1	2.2	2.7	3.2	77	21	2.2	0.09	0.31	7.2	1.7
26	1.8	2.0	2.2	2.5	3.1	70	19	1.1	0.29	0.29	6.2	1.9
27	1.7	2.0	2.1	2.3	3.1	57	14	0.82	0.55	0.22	4.1	2.0
28	e1.8	1.9	1.8	2.5	3.3	49	13	0.61	1.5	0.21	3.2	2.0
29	1.9	2.0	2.1	2.9	3.4	42	11	0.69	10	0.20	3.0	2.5
30	1.6	2.2	2.0	2.8	--	37	11	0.73	14	0.13	2.8	2.1
31	1.5	--	2.0	2.9	--	34	--	0.49	--	0.10	2.8	--
TOTAL	63.45	45.37	69.2	75.6	86.2	1092.0	1473	258.24	29.51	42.60	167.53	46.97
MEAN	2.05	1.51	2.23	2.44	2.97	35.2	49.1	8.33	0.98	1.37	5.40	1.57
MAX	4.5	2.2	2.7	2.9	3.4	77	106	24	14	8.8	17	4.2
MIN	0.29	0.71	1.8	2.0	2.5	3.3	11	0.49	0.09	0.10	0.10	0.08
AC-FT	126	90	137	150	171	2170	2920	512	59	84	332	93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

(WY)	1984	1987	1979	1942	1962	1985	1979	1941	1973	1967	1955	1946
MEAN	9.08	7.83	9.72	10.3	12.2	29.9	91.0	34.9	9.04	9.47	22.4	12.7
MAX	213	37.8	46.6	38.9	43.3	182	397	374	95.4	40.3	143	105
MIN	0.07	0.32	0.83	2.08	2.84	1.89	1.26	0.44	0.01	0.00	0.59	0.02
(WY)	1957	1957	1957	1957	1990	1996	2000	1959	1963	2000	1960	

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1941 - 2004

ANNUAL TOTAL	2392.10	3449.67	
ANNUAL MEAN	6.55	9.43	21.5
HIGHEST ANNUAL MEAN			71.6
LOWEST ANNUAL MEAN			2.94
HIGHEST DAILY MEAN	49	Aug 29	1960 Oct 2 1983
LOWEST DAILY MEAN	0.01	Jul 5	0.00 Sep 10 1950
ANNUAL SEVEN-DAY MINIMUM	0.01	Jul 7	0.00 Sep 10 1950
ANNUAL RUNOFF (AC-FT)	4740	6840	15600
10 PERCENT EXCEEDS	18	38	42
50 PERCENT EXCEEDS	3.1	2.4	6.6
90 PERCENT EXCEEDS	0.35	0.15	1.0

e Estimated